

- 1 1. (Unchanged) An optical subassembly for an optoelectronic module, comprising:
2 a lens;
3 an optoelectronic device;
4 an adhesive interface positioned between and in physical contact with the lens and the
5 optoelectronic device.
- 1 2. (Unchanged) The optical subassembly as recited in claim 1, wherein optoelectronic device
2 includes a laser.
- 1 3. (Unchanged) The optical subassembly as recited in claim 1, wherein optoelectronic device
2 includes a photoelectric receiver chip.
- 1 4. (Unchanged) The optical subassembly as recited in claim 1, wherein the lens has a surface
2 the shape of which is selected based on a refractive index of the adhesive interface.
- 1 5. (Unchanged) The optical subassembly as recited in claim 1, wherein the lens is integrally
2 formed with a housing member of the optical subassembly, and wherein the adhesive interface is
3 in physical contact with at least a portion of the housing member that does not comprise the lens.
- 1 6. (Unchanged) The optical subassembly as recited in claim 5, wherein at least a portion of
2 the housing member and the lens is formed from polyetherimide.
- 1 7. (Unchanged) The optical subassembly as recited in claim 1, wherein the adhesive
2 interface has a predetermined optical transmittance at the operating wavelength of the
3 optoelectronic device.

1 8. (Unchanged) The optical subassembly as recited in claim 7, wherein the operating
2 wavelength of the optoelectronic device is about 850nm.

1 9. (Unchanged) The optical subassembly as recited in claim 1, wherein the adhesive
2 interface is formed by curing an adhesive material selected from the group consisting of acrylic
3 adhesives, urethane-acrylate adhesives, epoxy adhesives, and mixtures thereof.

1 10. (Unchanged) The optical subassembly as recited in claim 9, wherein the adhesive material
2 is a urethane-acrylate adhesive that includes a polyurethane oligomer.

1 11. (Unchanged) An optoelectronic module, comprising:
2 a housing;
3 an electronic circuit board mounted within the housing;
4 at least one optical subassembly connected to the electronic circuit board, the at least one
5 optical subassembly comprising:
6 a lens;
7 an optoelectronic device;
8 an adhesive interface positioned between and in physical contact with the lens and the
9 optoelectronic device.

1 12. (Unchanged) The optoelectronic module as recited in claim 11, wherein the at least one
2 optical subassembly includes a transmitter optical subassembly the optoelectronic device of which
3 includes a laser, and wherein the at least one optical subassembly includes a receiver optical
4 subassembly the optoelectronic device of which includes a photoelectric receiver chip.

1 13. (Unchanged) The optoelectronic module as recited in claim 11, wherein the lens has a
2 surface the shape of which is selected based on a refractive index of the adhesive interface.

1 14. (Unchanged) The optoelectronic module as recited in claim 11, wherein the lens is
2 integrally formed with a housing member of the optical subassembly, and wherein the adhesive
3 interface is in physical contact with at least a portion of the housing member that does not
4 comprise the lens.

1 15. (Unchanged) A method of making an optical subassembly for an optoelectronic module,
2 comprising the steps of:
3 applying an adhesive to a lens;
4 applying an adhesive to an optoelectronic device;
5 joining the lens having the adhesive applied thereto and the optoelectronic device having
6 the adhesive applied thereto;
7 curing the joined adhesive to form an adhesive interface positioned between and in physical
8 contact with the lens and the optoelectronic device.

1 16. (Unchanged) The method as recited in claim 15, wherein optoelectronic device includes a
2 laser.

1 17. (Unchanged) The method as recited in claim 15, wherein optoelectronic device includes a
2 photoelectric receiver chip.

1 18. (Unchanged) The method as recited in claim 15, wherein the lens is integrally formed with
2 a housing member of the optical subassembly, and wherein the step of applying the adhesive to
3 the lens further comprises applying the adhesive to a portion of the housing member that does not
4 comprise the lens, whereby the adhesive interface is formed in physical contact with at least the
5 portion of the housing member that does not comprise the lens.

1 19. (Unchanged) The method as recited in claim 15, wherein the adhesive includes an
2 adhesive material selected from the group consisting of acrylic adhesives, urethane-acrylate
3 adhesives, epoxy adhesives, silicone-based adhesives, and mixtures thereof.

1 20. (Unchanged) The method as recited in claim 18, wherein the curing step includes the step
2 of exposing the joined adhesive to UV radiation through the housing member.

1 21. (Unchanged) The method as recited in claim 15, wherein the curing step includes the step
2 of heating the joined adhesive.

1 22. (New) An optical subassembly for an optoelectronic module, comprising:
2 a housing defining an interior cavity;
3 a lens which refracts light passing between said interior cavity and outside said housing;
4 an optoelectronic device facing said interior cavity opposite said lens; and
5 an adhesive interface filling at least a portion of said interior cavity between said lens and
6 said optoelectronic device, said adhesive interface being in physical contact with said lens and
7 said optoelectronic device, wherein light passing between said optoelectronic device and said lens
8 passes through said adhesive interface.

1 23. (New) The optical subassembly as recited in claim 22, wherein said optoelectronic device
2 includes a laser.

1 24. (New) The optical subassembly as recited in claim 22, wherein said optoelectronic device
2 includes a photoelectric receiver chip.

1 25. (New) The optical subassembly as recited in claim 22, wherein said lens has a surface the
2 shape of which is selected based on a refractive index of the adhesive interface.

1 26. (New) The optical subassembly as recited in claim 22, wherein said lens is integrally
2 formed with said housing, and wherein the adhesive interface is in physical contact with at least a
3 portion of the housing that does not comprise the lens.

1 27. (New) The optical subassembly as recited in claim 22, wherein said adhesive interface fills
2 substantially all of said cavity.